1,获取用户中心数据

- 目的: 在渲染用户中心界面的时候,能够携带用户的数据
- 操作流程:
  - 1, 给用户模型添加email_active字段

```
class User(AbstractUser):
    ...
    email_active = models.BooleanField(default=False,verbose_name="邮箱激活状态")
```

  - 2, 迁移
  - 3,在类视图中渲染即可

```
class UserCenterView(MyLoginRequiredMiXinView):

    def get(self,request):
        #1,组织数据
        context = {
            "username":request.user.username,
            "mobile":request.user.mobile,
            "email":request.user.email,

 "email_active":request.user.email_active
        }

        #2,返回页面渲染
        return render(request, 'user_center_info.html',context=context)
```

2,邮箱发送文档,测试

- 目的: 能够参考官方文档发送邮件,测试即可
- 操作流程:

- 1, 配置邮件后端(dev.py)

```
#邮件配置
EMAIL_BACKEND = 'django.core.mail.backends.smtp.EmailBackend' # 指定邮件后端
EMAIL_HOST = 'smtp.163.com' # 发邮件主机
EMAIL_PORT = 25 # 发邮件端口
EMAIL_HOST_USER = 'jinghedeveloper@163.com' # 授权的邮箱
EMAIL_HOST_PASSWORD = 'abcd1234' # 邮箱授权时获得的密码，非注册登录密码
EMAIL_FROM = '美多商城<jinghedeveloper@163.com>' # 发件人抬头
```

- 2,在终端中测试

```
In [1]: from django.core.mail import send_mail



In [2]: send_mail(subject='约吗?',message='今晚小树
林',from_email='jinghedeveloper@163.com',recipient_list=['hejing@itcast.cn'])
```

3,邮件发送后端集成

- 目的: 能够通过代码的格式实现邮件发送
- 操作流程:
  - 1, 根据前端页面编写子路由

```
urlpatterns = [
    ...

 url(r'^emails/$',views.EmailSendView.as_view()
),
]
```

- 2,编写发送邮件类视图

```
class EmailSendView(MyLoginRequiredMiXinView):
    def put(self,request):
        #1,获取参数
        dict_data =
json.loads(request.body.decode())
        email = dict_data.get("email")

        #2,校验参数
        #2.1 为空校验
        if not email:
            return
http.HttpResponseForbidden("参数不全")

        #2.2 格式校验
        if not re.match(r'^[a-z0-9][\w\.\-
]*@[a-z0-9\-]+(\.[a-z]{2,5}){1,2}$',email):
            return
http.HttpResponseForbidden("邮件格式有误")

        #3,发送邮件
        send_mail(subject='约吗?',
                  message='今晚小树林',

 from_email=settings.EMAIL_FROM,
                  recipient_list=[email])

        #4,数据入库
        request.user.email = email
        request.user.save()

        #5,返回响应
```

```
        return http.JsonResponse({"code":RET.OK,"errmsg":"ok"})
```

4,拼接验证链接

- 目的: 能够拼接加密的token链接, 发送给用户邮箱, 来激活用户邮箱
- 操作流程:
  - 1, 创建生成加密链接的方法(utils/email.py)

```python
from django.conf import settings
from itsdangerous import TimedJSONWebSignatureSerializer as TJSWSerializer

#1,生成加密的url链接地址
def generate_verify_url(user):

    #1,创建数据信息
    dict_data = {"user_id":user.id, "email":user.email}

    #2,创建TJSWSerializer对象
    serializer = TJSWSerializer(secret_key=settings.SECRET_KEY, expires_in=60*30)

    #3,加密
    token = serializer.dumps(dict_data)

    #4,拼接链接
    verify_url = "%s?token=%s"%(settings.EMAIL_VERIFY_URL,token.decode())

    #5,返回
    return verify_url
```

  - 2,发送链接(users/views.py)

```python
class EmailSendView(MyLoginRequiredMiXinView):
    def put(self,request):
        ...
        #3,发送邮件
        verify_url = generate_verify_url(request.user)
        send_mail(subject='美多商城邮箱激活',
                  message=verify_url,
                  from_email=settings.EMAIL_FROM,
                  recipient_list=[email])

        ...
```

5,celery封装邮件发送

- 目的: 使用celery封装发送邮件的任务
  - 1,创建发送邮件的任务(celery_tasks/email/tasks.py)

```python
from django.core.mail import send_mail
from django.conf import settings
from celery_tasks.main import app

@app.task(bind=True,name="send_verify_url")
def send_verify_url(self,verify_url,email):
    #1,发送短信
    result = -1
    try:
        result = send_mail(subject='美多商城邮箱激活',
                  message=verify_url,
                  from_email=settings.EMAIL_FROM,
                  recipient_list=[email])
    except Exception as e:
        result = -1

    #2,判断结果
    if result == -1:
```

```
        print("重试中....")
        self.retry(countdown=5,max_retries=3,
                   exc=Exception("发送邮件失败
啦!!!"))

```

- 2,添加任务到celery中

```
app.autodiscover_tasks([..."celery_tasks.email.
tasks"])

```

- 3,在类视图中是发送

```
    def put(self,request):
        ...

 send_verify_url.delay(verify_url,email)
#celery发送邮件


        #4,数据入库
        request.user.email = email
        request.user.save()

        #5,返回响应
        return
http.JsonResponse({"code":RET.OK,"errmsg":"ok"
})
```

6,邮箱发送验证

- 目的: 能够校验地址中的token, 激活用户的邮箱
- 操作流程:
  - 1,编写解密token的方法(utils/email.py)

```
#2,加密token
def decode_token(token):

    #1,创建TJSWSerializer对象

```

```
    serializer = TJSWSerializer(secret_key=settings.SECRET_KEY, expires_in=60 * 30)

    #2,解密数据
    try:
        dict_data = serializer.loads(token)

        user_id = dict_data.get("user_id")

        user =  User.objects.get(id=user_id)

    except Exception:
        return None

    #3,返回user
    return user
```

- 2,根据链接地址,编写子路由(user/urls.py)

```
url(r'^emails/verification/$',views.EmailActiveView.as_view()),
```

- 3,类视图中修改邮箱的激活状态(uisers/views.py)

```
class EmailActiveView(View):
    def get(self,request):
        #1,获取token参数
        token = request.GET.get("token")

        #2,校验参数
        if not token:
            return http.HttpResponseForbidden("token丢失")

        user = decode_token(token)

        if not user:
            return http.HttpResponseForbidden("token过期")

        #3,数据入库(修改邮箱的激活器状态)
```

```
16          user.email_active = True
17          user.save()
18
19          #4,返回响应(重定向到个人中心)
20          return redirect('/info')
```

7,渲染收货地址界面

- 目的: 能够定义类视图渲染收货地址页面
- 操作流程:
    - 1,根据前端html地址,编写子路由(users/urls.py)

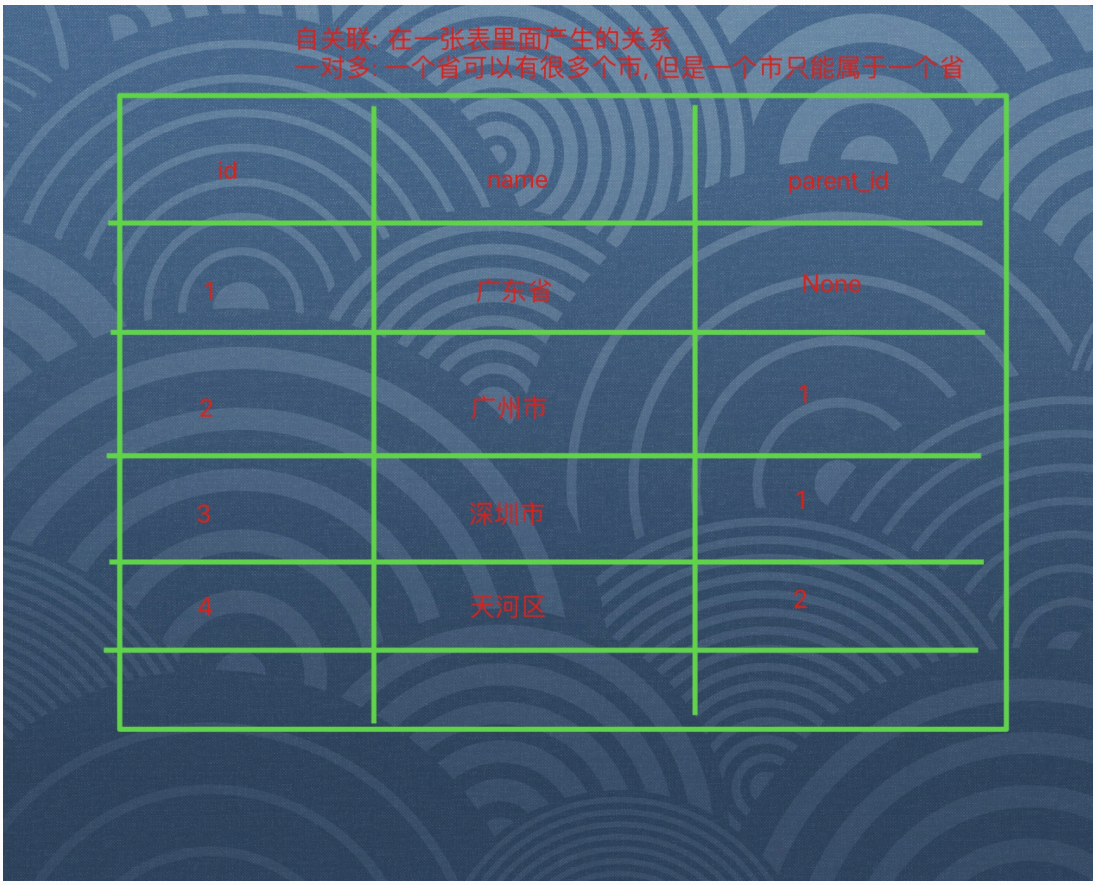
```
1  url(r'^addresses/$',views.AddressView.as_view()
   ),
```

    - 2,渲染页面(users/views.py)

```
1  class AddressView(MyLoginRequiredMixinView):
2      def get(self,request):
3          return
   render(request,'user_center_site.html')
```

8,区域模型类,测试数据

- 目的: 能够理解区域模型类的设计结构
- 操作流程:
    - 1, 结构图解



- 2,模型类编写

```
from django.db import models

class Area(models.Model):
    name = models.CharField(max_length=20,verbose_name="区域名")
    parent = models.ForeignKey('self',related_name="subs",on_delete=models.SET_NULL,null=True,blank=True,verbose_name="上级区域")

    class Meta:
        db_table = "tb_areas"

    def __str__(self):
        return self.name
```

- 3,迁移,添加测试数据

- 注意点:
  - 一查多: area.subs

- 多查一: area.parent

```
In [1]: from areas.models import Area



In [2]: city = Area.objects.get(name='广州市')



In [3]: city



Out[3]: <Area: 广州市>

In [4]: city.parent



Out[4]: <Area: 广东省>

In [5]: city.subs.all()



Out[5]: <QuerySet [<Area: 荔湾区>, <Area: 越秀区>, <Area: 海珠区>, <Area: 天河区>, <Area: 白云区>, <Area: 黄埔区>, <Area: 番禺区>, <Area: 花都区>, <Area: 南沙区>, <Area: 从化区>, <Area: 增城区>]>

In [6]:

```

9,区域类视图

- 目的: 可以编写类视图,获取对应的区域信息

- 1, 子路由(areas/urls.py)

```python
from django.conf.urls import url
from . import views

urlpatterns = [
    url(r'^areas/$',views.AreaView.as_view())
]
```

- 2,类视图(areas/views.py)

```python
class AreaView(View):
    def get(self,request):
        #1,获取参数area_id
        area_id = request.GET.get("area_id")

        #2,判断area_id是否有值
        if area_id: #(市,区)

            #3.1 获取上级区域
            area = Area.objects.get(id=area_id)

            #3.2 获取上级区域的子级区域
            sub_data = area.subs.all()

            #3.3 数据转换
            sub_data_list = []
            for sub in sub_data:
                sub_dict = {
                    "id":sub.id,
                    "name":sub.name
                }
                sub_data_list.append(sub_dict)

            #3.4 数据拼接
            context = {
                "code":RET.OK,
                "errmsg":"ok",
                "sub_data":{
                    "id":area.id,
                    "name":area.name,
```

```
                    "subs":sub_data_list
                }
            }

            return http.JsonResponse(context)

        else:# (省)

            #4.1 查询数据
            areas =
 Area.objects.filter(parent__isnull=True).all(
)

            #4.2 数据转换
            areas_list = []
            for area in areas:
                area_dict = {
                    "id":area.id,
                    "name":area.name
                }
                areas_list.append(area_dict)

            #4.3 拼接数据
            context = {
                "code":RET.OK,
                "errmsg":"OK",
                "province_list":areas_list
            }

            return http.JsonResponse(context)

```

10,定义用户地址模型类

- 目的: 能够理解用户收货地址的定义格式
    - 1, 定义地址模型类 (11个字段)

```
class Address(BaseModel):
    """用户地址"""
    user = models.ForeignKey(User,
on_delete=models.CASCADE,
related_name='addresses', verbose_name='用户')
```

```
    title = models.CharField(max_length=20, verbose_name='地址名称')
    receiver = models.CharField(max_length=20, verbose_name='收货人')
    province = models.ForeignKey('areas.Area', on_delete=models.PROTECT, related_name='province_addresses', verbose_name='省')
    city = models.ForeignKey('areas.Area', on_delete=models.PROTECT, related_name='city_addresses', verbose_name='市')
    district = models.ForeignKey('areas.Area', on_delete=models.PROTECT, related_name='district_addresses', verbose_name='区')
    place = models.CharField(max_length=50, verbose_name='地址')
    mobile = models.CharField(max_length=11, verbose_name='手机')
    tel = models.CharField(max_length=20, null=True, blank=True, default='', verbose_name='固定电话')
    email = models.CharField(max_length=30, null=True, blank=True, default='', verbose_name='电子邮箱')
    is_deleted = models.BooleanField(default=False, verbose_name='逻辑删除')

    class Meta:
        db_table = 'tb_address'
        verbose_name = '用户地址'
        verbose_name_plural = verbose_name
        ordering = ['-update_time']

```

- 2, 给用户添加默认收货地址

```
class User(AbstractUser):
    ...
    default_address = models.ForeignKey('Address', related_name='users', null=True, blank=True, on_delete=models.SET_NULL, verbose_name='默认地址')

```

- 3,迁移

11,地址数据渲染

- 目的: 可以根据前端html需要的数据, 在后端进行组织,拼接返回

```
class AddressView(MyLoginRequiredMiXinView):
    def get(self,request):

        #1,获取用户所有的地址
        addresses = request.user.addresses.filter(is_deleted=False)

        #2,数据拼接
        addresses_list = []
        for address in addresses:
            address_dict = {
                "id":address.id,
                "title":address.title,
                "receiver":address.receiver,
                "province":address.province.name,
                "city":address.city.name,
                "district":address.district.name,
                "place":address.place,
                "mobile":address.mobile,
                "tel":address.tel,
                "email":address.email,
            }
            addresses_list.append(address_dict)

        context = {
            "addresses":addresses_list,
```

```
 "default_address_id":request.user.default_address_id
        }

        #3,返回渲染页面
        return render(request,'user_center_site.html',context=context)
```

12,新增地址

- 目的:能够通过前端携带的数据,创建地址对象
- 操作流程:
  - 1, 根据js代码编写路由(users/urls.py)

```
url(r'^addresses/create/$',views.AddressCreateView.as_view()),
```

  - 2,创建地址对象,入库(users/views.py)

```
class AddressCreateView(MyLoginRequiredMiXinView):
    def post(self,request):
        #1,获取参数
        dict_data = json.loads(request.body.decode())
        title = dict_data.get("title")
        receiver = dict_data.get("receiver")
        province_id = dict_data.get("province_id")
        city_id = dict_data.get("city_id")
        district_id = dict_data.get("district_id")
        place = dict_data.get("place")
        mobile = dict_data.get("mobile")
        tel = dict_data.get("tel")
        email = dict_data.get("email")

```

```
        #2,校验参数
        if not
all([title,receiver,province_id,city_id,distri
ct_id,place,mobile,tel,email]):
            return
http.HttpResponseForbidden("参数不全")

        #3,数据入库
        dict_data["user"] = request.user
        address =
Address.objects.create(**dict_data)

        #4,返回响应
        address_dict = {
            "id": address.id,
            "title": address.title,
            "receiver": address.receiver,
            "province": address.province.name,
            "city": address.city.name,
            "district": address.district.name,
            "place": address.place,
            "mobile": address.mobile,
            "tel": address.tel,
            "email": address.email,
        }
        return
http.JsonResponse({"code":RET.OK,"address":add
ress_dict})
```